& CONSULTING, LLC

RE: SPEX -

Verizon Wireless "Belmont" 20101 Academic Way Justification Statement RECEIVED
MAY 0 7 2010

LOUDOUN COUNTY
DEPARTMENT OF PLANNING

## **Project Description:**

The proposed development at the referenced site involves the removal of the nine (9) existing telecommunications antennas, from the rooftop, and installation of up to fifteen (15) new panel antennas. The proposed antenna layout would be for five (5) antennas per sector, in three sectors: Alpha, Beta, and Gamma. The antennas would alternate at 8' height and 6' height, which is taller than the existing antennas; however, the new antenna widths would be narrower.

The new antennas will serve two purposes. First, is to upgrade the existing cellular and PCS service in the immediate vicinity and to improve the capacity for those service categories. The larger sized antennas will accomplish that. Second, is to add a new service, called LTE, which is a new service that operates at a 700 MHz frequency, which is different that the frequencies used for cellular and PCS transmissions. This LTE service is part of Verizon's "fourth generation" technology for wireless communications. The larger size antenna is designed to allow for the greatest capacity (service volume) and to avoid the need for frequent swap-outs in the future.

Enclosed with the application package are propagation maps showing the current service ranges and the estimated service ranges based on the proposed antenna changes. There is not a vast difference in service for cellular and PCS service because those services already exist at the site. And, since there is no existing LTE service, the existing service level is zero.

## Standards for Special Exception Review - Section 1211.5:

1. To preserve the agricultural character of the County and to discourage the inappropriate location of non-farm uses in agricultural areas.

The subject property is zoned PD-RDP and is already developed with commercial, non-farm uses. The proposed development will maintain the commercial nature of the site and will not negatively impact the agricultural character of the County.

2. To conserve the ground water supply in the areas of the County where it is limited.

The subject property is serviced by public water. The proposed changes to the unmanned, rooftop telecommunication facility will require additional water usage or service.

3. To prevent high population density on soils that are incapable of providing adequate water supply, or of meeting proper sanitary requirements for sewage disposal.

The subject property is not serviced by wells or septic systems. Public water and sewer service are utilized at the site.

4. To protect against the overcrowding of land and undue density of population in relation to the community facilities existing or available.

The proposed development, for expansion of the existing unmanned, rooftop telecommunication facility will not cause overcrowding or undue density of population and will not create a strain on existing community facilities.

5. To facilitate orderly highway development and transportation, and lessen traffic hazards and congestion.

The proposed development will not generate and additional daily vehicle trips on the existing internal and external road networks. On average, only 1 vehicle trip to the site will be made on a monthly basis, for routine maintenance and service evaluations.

To protect residential sections from unnecessary traffic, fire hazards, noise, noxious fumes, or offensive odors and other unwholesome conditions and influences.

The subject property is zoned PD-RDP, which is a non-residential classification. Several surrounding properties are residentially zoned; however, the proposed development will not create additional traffic in those residential sections, nor will it create any detrimental fire hazards, noises, noxious fumes, offensive odors or other unwholesome conditions or influences.

Although the proposed antennas may be visible from the adjoining residentially zoned areas, the mere visual presence of the antennas does not constitute an unwholesome condition. Furthermore, the visibility will be minimized by utilizing a light gray antenna color which is intended to blend the antenna into the sky background.

7. The proposed use at the specific location shall be in harmony with the policies embodied in the adopted Comprehensive Plan.

The proposed development is in harmony with the Comprehensive Plan because it proposes to install the additional antennas on the rooftop of an existing building, which is the preferred location for telecommunication facilities.

8. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.

The subject property is zoned PD-RDP and is designated for the development of Keynote Employment uses. The existing building is part of the George Washington University academic facilities, which is consistent with the corporate/business (non-residential) character intended by Keynote Employment uses.

The property is subject to the 1972 Zoning Ordinance, which does not specifically address telecommunication facilities. However, the County's Strategic Land Use Plan for Telecommunication Facilities does address such uses and outlines a preference for installation of such uses on rooftops. Therefore, the proposed development is in harmony with the underlying zoning district regulations and other County policies.

9. The proposed use shall be such that it will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the applicable provisions of the adopted Comprehensive Plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering, and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.

The proposed expansion of the existing, roof-top telecommunication facility will not adversely affect the use or development of neighboring properties because the majority of neighboring properties are already developed as residential, commercial office and retail uses. The nearest undeveloped land to the subject building belongs to the George Washington University and is intended to developed in the future for additional academic/office facilities.

There is no existing landscaping associated with the roof-top antennas. The only buffering associated with the antennas is the use of antenna color that will allow the antennas to blend in, to the extent possible, with the sky/background. Additionally, the subject building is more than several hundred feet from any adjoining property line (other than a road) which also minimizes the visibility of the antennas and minimized any impact the antennas might have on neighboring properties.

Prepared by: <u>Harold Bernadzikowskii</u>

Date: <u>5/6/2010</u>